PATENT Page 2 of 27

Amendment to the Claims:

Please cancel claims 1-50 without prejudice.

Fleace enter claims 1-111 as follows:

R1126

A: (new) An apparatus for distributing one or more channels included within each of a plurality of N signals to one or more output devices, the apparatus comprising:

a crosspoint switch having a plurality of N crosspoint switch inputs and a plurality of crosspoint switch outputs, each of the N crosspoint switch inputs coupled to receive one of the N signals, the crosspoint switch operable to switchably couple any of the N crosspoint switch inputs to any one or more of the crosspoint switch outputs, wherein one or more channels included within a first of the N signals overlaps in frequency with one of more channels included within a second of the N signals; and

a plurality of band translation devices, each having an input coupled to a respective one of the crosspoint switch outputs and an output configured to couple to one or more output devices, each of the one or more band translation devices operable to pass one or more of the channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels.

- 52 (new). The apparatus of claim 7, wherein the one or more channels included within one or more of the N signals comprises respective one or more frequency division multiplexed channels having a different certiler frequency.
- 51
 (new). The apparatus of claim 4, wherein the one or more channels included within one or more of the N signals comprises at least one multiplexed channel, the multiplexed channel operating at a predetermined carrier frequency and comprising the content of two or more channels.

BEST AVAILABLE COI

PATENT Page 3 of 27

- (new). The apparatus of claim 3, wherein the content of the two or more channels comprises digital content, and wherein the multiplexed channel comprises a multiplexed digital channel.
- E. (new) The apparatus of claim 1, wherein at least one of the N signals comprises a plumity of frequency bands:
- (new) The apparatus of claim 4, wherein the crosspoint switch and the plurality of band translation devices are included within an integrated circuit.
- (new) The apparatus of claim % wherein two or more band translation devices are coupled to the same local oscillator source.
- (new) The apparatus of claim?, wherein two or more band translation devices are coupled to different variable local oscillator sources.
- (naw) The apparatus of claim % wherein the output of each one of the band translation devices is configured to couple to a single output device.
- (inew) The apparatus of claim 4, wherein the outputs of two or more of the band translation devices are coupled together.
- (new) The apparatus of claim 18, wherein the outputs of the two or more band translation devices are configured to couple to a single output device.
- (new) The apparatus of claim * wherein the cutput of at least one of the band translation devices is configured to couple to a plurality of output devices.

- 12. (new) The apparatus of claim 10, further comprising a signal combiner having (i) a plurality of inputs coupled to respective plurality of band translation device outputs, and (ii) an output coupled to one or more output devices.
- 14. (new) The apparatus of claim 18, wherein the output of the signal combiner is coupled to each of the one or more cutput devices.
- 15. (new) The apparatus of claim 18, wherein the output of the signal combiner is coupled to a first subset of the one or more output devices; the apparatus further comprising a second signal combiner having a plurality of inputs coupled to respective plurality of band translation device outputs, and an output coupled to a second subset of one of more output devices.
- 36. (new) The apparatus of claim 38, further comprising a respective plurality of filters, each respective filter coupled between a band translation device output and a signal combiner input.
- (new): The apparatus of claim 18, wherein the plurality of filters are selected from the group consisting of a high pass filter, a lowpass filter, a bandpass filter, and a diplexer.
- (new) The apparatus of claim 18, wherein the plurality of filters are implemented separately from the crosspoint switch.
- 19. (new) The apparatus of claim 18, wherein the plurelity of filters, the crosspoint switch and the plurality of band translation devices are monolithically formed on an Integrated circuit.

PATENT Page 5 of 27

21. (new) The apparatus of claim 20, wherein each of the plurality of variable gain amplifiers comprises an input coupled to receive a respective one of the N signals, a control lineut, and an output coupled to one of the inputs of the crosspoint switch, wherein each of the variable gain amplifiers is operable, responsive to a control signal received at the control input, to apply gain or attenuation to a signal input thereto.

(new) The apparatus of claim 21, further comprising a respective plurality of detectors, each detector having an input coupled to the input of one variable gain amplifier and an output coupled to the control port of said variable gain amplifier, each of the detectors operable to control the gain or attenuation level of the variable gain amplifier as a function of the power detected.

7/
23. (new) The apparatus of claim 2/1, further comprising a respective pturality of detectors, each detector having an input coupled to the output of one variable gain amplifier and an output coupled to the control port of said variable gain amplifier, each of the detectors operable to control the gain or attenuation level of the variable gain amplifier as a function of the power detected.

24. (new). The apparatus of claim 21, wherein the crosspoint switch, the plurality of band translation devices, and the plurality of variable gain amplifiers are included within an integrated circuit.

75 (new) The apparatus of claims, further comprising at least one LNB converter operable to provide the N signals.

6. . 17/38

28: (new) The apparatus of claim 1/2 wherein said crosspoint switch comprises a first crosspoint switch, said plurality of band translation devices comprises a plurality of first band translation devices, and said output devices comprise first output devices, the apparatus further comprising:

a second crosspoint switch having a plurality of N crosspoint switch inputs and a plurality of crosspoint switch outputs, each of the N second crosspoint switch inputs coupled to either: (1) a respective one of the first crosspoint switch inputs, or (ii) a respective one of the first crosspoint switch outputs, each of the second crosspoint switch pulpuls configured to couple to one or more second output devices, the second crosspoint switch operable to switchably couple any of the plurality of N second crosspoint switch inputs to any one or more of the plurality of sebond crosspoint switch outputs; and

a plurality of second band translation devices, each having an input coupled to a respective one of the second crosspoint switch outputs and an output configured to couple to one or more second output devices, each of the one or more second band translation devices operable to pass one or more channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels.

27.: (new) The apparatus of claim 26, wherein the second crosspoint switch and the plurally of second band translation devices are included within a second integrated droult.

25. (flew) The apparatus of claim 26, wherein the output of each one of the second band translation devices is configured to couple to a single second output device.

(new) The apparatus of claim 26, wherein the outputs of two or more of the second barid translation devices are coupled together.

PATENT Page 7 of 27

(new). The apparatus of claim 28, wherein the outputs of the two or more second band translation devices are configured to couple to a single second output device.

(new) The apparatus of claim 28, wherein the output of at least one of the second band translation devices is configured to couple to a plurality of second output devices.

22 (new) The apparatus of claim 26, wherein the output of at least one of the first band translation devices is coupled to at least one output of the second band translation devices.

(4) 38; (new) The apparatus of claim.29, further comprising a second signal combiner. having (i) a plurality of inputs coupled to respective plurality of second band translation device outputs, and (ii) an output coupled to one or more second output devices.

34. (new) The apparatus of claim 36, further comprising a respective plurality of second filters, each respective second filter coupled between a second band translation device output and a second signal combiner input.

36. (new) The apparatus of claim 26, further comprising a plurality of second variable gain amplifiers coupled to the second crosspoint switch, each of the plurality of second variable gain amplifiers operable to apply gain or attenuation to a signal input thereto.

36. (new) The apparatus of claim 35, wherein the second crosspoint switch, the plurality of second band translation devices, and the plurality of second veriable gain amplifies are included within a second integrated circuit.

(new) An apparatus for distributing one or more channels included within a plurality of N signals to one or more output devices, the apparatus comprising:

a crosspoint switch having a plurality of N crosspoint switch inputs and a plurality of crosspoint switch outputs, each of the N crosspoint switch inputs coupled to receive

PATENT Page 8 of 2

cris of the N signals, the crosspoint switch operable to switchably couple any of the plurality of N crosspoint switch inputs to any one or more of the plurality of crosspoint switch outputs, and

respective one of the crosspoint switch outputs and an output coupled to a crosspoint switch outputs and an output configured to couple to one or more output devices, each of the one or more band translation devices operable to pass one or more channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels.

wherein the outputs of at least two of the plurality of band translation devices are coupled together.

38. (new) The apparatus of claim 37, wherein the one or more channels included within one or more of the N signals comprises respective one or more frequency division multiplexed channels, each of the one or more frequency division multiplexed channels having a different carrier frequency.

(new) The apparatus of claim 37, wherein the one or more channels included within one or more of the N signals comprises at least one multiplexed channel, the multiplexed channel operating at a predetamined carrier frequency and comprising the content of two or more channels.

40. (new) The apparatus of claim 36, wherein the content of the two or more channels comprises digital content, and wherein the multiplexed channel comprises a multiplexed digital channel.

9)
(new) The apparatus of claim 37, wherein at least one of the N signals comprises a plurality of frequency bands.

92. (new) The apparatus of claim 37, wherein the crosspoint switch and the plurality of band translation devices are included within an integrated circuit.

PATENT Page 9 of 27

48: (new) The apparatus of claim 37, wherein two or more band translation devices are coupled to the same local oscillator source.

(new) The apparatus of claim 27, wherein two or more band translation devices are coupled to different variable local oscillator sources.

45. (new) The apparatus of claim 37, wherein the output of each one of the band translation devices is configured to couple to a single output device.

96: (new) The apparatus of claim 37, further comprising at least one low noise block converter operable to provide the N signals.

91: (riew) The apparatus of claim 37, wherein the coupled output of the two or more band translation devices is configured to couple to a single output device.

AB (new) The apparatus of claim 37, wherein the output of at least one of the band translation devices is configured to couple to a plurality of output devices.

49. (new) The apparatus of claim 37, further comprising a signal combiner having (I) a plurality of inputs coupled to respective plurality of band translation device outputs, and (II) an output comprising the coupled output of the two or more band translation devices.

100 :: (new) The apparatus of claim 45, wherein the output of the signal combiner is coupled to each of the one or more output devices.

[7] (new) The apparatus of claim 46, wherein the output of the signal combiner is coupled to a first subset of the one or more output devices; the apparatus further comprising a second signal combiner having a plurality of inputs coupled to respective

PATENT Page 10 of 27

plurality of band translation device outputs, and an output coupled to a second subset of one or more output devices.

62. (new) The apparatus of claim 48; further comprising a respective plurality of filters, each respective filter coupled between a band translation device output and a signal combiner input.

67
.53: (new) The apparatus of claim 37, further comprising a plurality of variable gain amplifiers coupled to the crosspoint switch, each of the plurality of variable gain amplifiers operable to apply gain or attenuation to a signal input thereto.

103
54. (new) The apparatus of claim 68, wherein each of the plurality of variable gain amplifiers comprises an input coupled to receive a respective one of the N signals, a control input, and an output coupled to one of the inputs of the crosspoint switch, wherein each of the variable gain amplifiers is operable, responsive to a control signal received at the control input, to apply gain or attenuation to a signal input thereto.

86. (new) The apparatus of claim 64, further comprising a respective plurality of detectors, each detector having an input coupled to the input of one variable gain amplifier and an output coupled to the control port of said variable gain amplifier, each of the detectors operable to control the gain or attenuation level of the variable gain amplifier as a function of the power detected.

60. (riew) The apparatus of claim 34, further comprising a respective plurality of detectors, each detector having an input coupled to the output of one variable gain amplifier and an output coupled to the control port of said variable gain amplifier, each of the detectors operable to control the gain or attenuation level of the variable gain amplifier as a function of the power detected.

PATENT Page 11 of 27

67.....

57. (new) The apparatus of claim 94, wherein the crosspoint switch, the plurality of band translation devices, and the plurality of variable gain amplifiers are included within an integrated circuit.

(new) The apparatus of cisims?, wherein said crosspoint switch comprises a first crosspoint switch, said plurality of band translation devices comprises a plurality of first band translation devices, and said output devices comprise first output devices, the apparatus further comprising:

e second crosspoint switch having a plurality of N crosspoint switch inputs and a plurality of crosspoint switch outputs, each of the N second crosspoint switch inputs coupled to either: (i) a respective one of the first crosspoint switch inputs, or (ii) a respective one of the first crosspoint switch outputs, each of the second crosspoint switch outputs configured to couple to one or more second output devices, the second crosspoint switch operable to switchably couple any of the plurality of N second crosspoint switch inputs to any one or more of the plurality of second crosspoint switch outputs; and

applurality of second band translation devices, each having an input coupled to a respective one of the second crosspoint switch outputs and an output configured to couple to one or more second output devices, each of the one or more second band translation devices operable to pass one or more channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels,

wherein the outputs of at least two of the plurality of second band translation devices are coupled together.

59. (new) The apparatus of claim 56, wherein the second crosspoint switch and the plurality of second band translation devices are included within a second integrated circuit.

PÁTENT Page 12 of 27

110

න්ව. (new) The apparatus of claim 58, wherein the coupled output of the two or more second band translation devices is configured to couple to a single second output device.

108

At: (new) The apparatus of claim \$6, wherein the output of at least one of the second band translation devices is configured to couple to a plurelity of second output devices.

108
128. (new) The apparatus of claim 58, wherein the output of at least one of the first band translation devices is coupled to at least one output of the second band translation devices:

(New) The apparatus of claim 63, further comprising a respective plurality of second filters, each respective second filter coupled between a second band translation device butput and a second signal combiner input.

108
-BG. (new) The apparatus of claim.68, further comprising a plurality of second variable gain amplifiers coupled to the second crosspoint switch, each of the plurality of second variable gain amplifiers operable to apply gain or attenuation to a signal input thereto.

(new). The apparatus of claim.88, wherein the second crosspoint switch, the plurality of second band translation devices, and the plurality of second variable gain amplifiers are included within a second integrated circuit.

97. (new) In a signal distribution system having a crosspoint switch having N inputs operable to receive a respective plurality of N signals and a plurality of crosspoint switch.

PATENT Page 13 of 27

outputs, a respective plurality of band translation devices coupled to the crosspoint switch outputs, and one or more output devices coupled to at least one of the plurality of band translation devices, a method for distributing one or more channels included within any one of the plurality of N received signals to the one or more output devices, the method comprising:

receiving a plurality of N signals into the crosspoint switch, the crosspoint switch input having a respective plurality of N inputs, wherein one or more channels included within a first of the N signals overlaps in frequency one or more channels included within a second of the N signals;

selectively switching the crosspoint switch, whereby any of the plurality of N received signals is coupled to any one or more of the crosspoint switch outputs;

supplying one or more crosspoint switch output signals to respective band translation devices, each of the one or more crosspoint switch output signals including one or more channels;

pass the one or more of the plurality of the band translation devices either to pass the one or more channels as supplied therathrough, or to frequency translate one or more of the channels as supplied to respective one or more channels; and

contputting the pass-thru or frequency-translated channels to one or more output devices operable to render the one or more channels supplied thereto.

(18) (risw). The method of claim 97, wherein said crosspoint switch comprises the only crosspoint switch operable to distribute, to the one or more coupled output devices, one or more channels included within any of the plurality of N received signals.

(19). The method of claim \$7, wherein at least one of the N received signals compless a plurality of frequency bands.

130 117 30. (new) The method of claim.87, wherein:

one or more channels are grouped into a frequency band; and

PATENT Page 14 of 27

same frequency band.

121 (naw) The method of claim 91, wherein:

cone or more channels are grouped into a frequency band; and controlling comprises frequency translating the one or more channels to a different frequency band.

122 72. (new) The method of claim 87, wherein:

che or more channels are grouped into a frequency band; and controlling comprises passing through the one or more channels through the band translation device.

72: (new) The method of claim 97, further comprising combining the one or more frequency-translated channels with one or more pass-through channels to provide a composite signal.

177
(riew) The method of claim 67, further comprising combining the one or more frequency-translated channels with one or more additional frequency-translated channels to provide a composite signal.

122
76. (new) The method of cialm 72, further comprising combining the one or more pass-through channels with an additional one or more pass-through channels to provide a composite signal.

76. (naw) The method of claim of, wharein outputting the pase-thru or frequency-translated channels comprises outputting each of the pase-thru or frequency-translated channels onto a single line coupled to each of the one or more output devices.

PATENT Page 15 of 27

127

117

77. (new) The method of claim 97, wherein outputting the pass-thru or frequency translated channels comprises:

culputting one or more first pass-thru or frequency-translated channels onto a first line; coupled to a first of the one or more output devices; and

e ecopid line coupled to a second of the one or more output devices.

128

117

78. (new) The method of claim.97, wherein controlling comprises:

upconverting at least one of the channels from the first frequency to an intermediate frequency; and

downconverting the at least one of the channels from the intermediate frequency to the ascond frequency.

129

117

75. (new) The method of claim 87, wherein controlling comprises:

downconverting at least one of the channels from the first frequency to an intermediate frequency; and

upconverting the at least one of the channels from the intermediate frequency to the second frequency.

130

129

.80. (new) The method of claim 78, wherein downconverting comprises downconverting the at least one channel to baseband.

131

117

(new) The method of claim 87, further comprising filtering the pass-through or frequency-translated band of channels.

122

117

82. (riew) The method of claim 87, wherein frequency translating comprises either (I) downconverting one or more of the channels from a first frequency to the second frequency, or (II) up converting one or more of the channels from a first frequency to a second frequency.

Application No.: 10/735,521

PATENT Page 16 of 27

33

117

(new) The method of claim 97, further comprising variably adjusting a power level of clittles; (i) one or more of the N signals before input to respective N crosspoint switch inputs, (ii) at least one received signal output from the crosspoint switch, or (iii) one or more of the N signals prior to input to respective N crosspoint switch inputs and at least one received signal output from the crosspoint switch.

134

(new) The method of claim \$3, wherein variably adjusting a power level comprises attenuating the algneis in (i), (ii), or (iii).

35

ம். (new) The method of claim 88, wherein variably adjusting a power level comprises amplifying the signals in (I), (II), or (III).

136

.86. (new) The method of claim 87, further comprising:

receiving the plurality of the N signals into a second crosspoint switch, the second crosspoint switch input having a respective plurality of N inputs, wherein one or more channels included within a first of the N signals overlaps in frequency one or more channels included within a second of the N signals:

selectively switching the second crosspoint switch, whereby any one of the plurality of N. received signals is coupled to any one or more of the second crosspoint switch outputs;

supplying one or more second crosspoint switch output signals to respective second band translation devices, each of the one or more second crosspoint switch output signals including one or more channels;

chantrilling one or more of the plurality of the second band translation devices either to page one or more channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels; and

culputting the pass-thru or frequency-translated channels to one or more second output devices operable to render the one or more channels supplied thereto.

PATENT Page 17 of 27

(new) An apparatus for distributing one or more channels included within each of a plurality of N satellite IF signals to one or more output devices, the apparatus comprising:

a crosspoint switch having a plurality of N crosspoint switch inputs and a plurality of crosspoint switch outputs, each of the N crosspoint switch inputs coupled to receive one of the N satelijts IF signals, the crosspoint switch operable to switchably couple any of the plurality of N crosspoint switch inputs to any one or more of the plurality of crosspoint switch outputs, wherein one or more channels included within a first of the N satelijts IF signals overlaps in frequency one or more channels included within a second of the N satelijts IF signals; and

a plurality of band translation devices, each having an input coupled to a inspective one of the crosspoint switch outputs and an output configured to couple to one or more output devices; each of the one or more band translation devices operable to pass one or more channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels.

wherein the outputs of at least two of the plurelity of band translation devices are coupled together.

138

BS; (new) The apparatus of claim 87, wherein the one or more channels included within one or more of the N satellite. If signals comprises respective one or more frequency division multiplexed channels, each of the one or more frequency division multiplexed channels having a different carrier frequency.

137
28: (new) The apparatus of claim 87, wherein the one or more channels included within one or more of the N satellite IF signals comprises at least one multiplexed channel operating at a predatermined carrier frequency and comprising the content of two or more channels.

PATENT Page 18 of 27

IHO.

90. (new) The apparatus of claim 86, wherein the content of the two or more channels comprises digital content, and wherein the multiplexed channel comprises a multiplexed digital channel.

Comity The amount of state

Minaw). The apparatus of claim 97, wherein at least one of the N satellite IF signals complises a plurality of frequency bands.

142

92. (new) The apparatus of claim 87, wherein the crosspoint switch and the plurality of band translation devices are included within an integrated circuit.

137
35. (riew) The apparatus of claim 87, wherein two or more band translation devices are coupled to the same local oscillator source.

144

94. (risw) The apparatus of daim 87, wherein two or more band translation devices are coupled to different variable local oscillator sources.

137. (new) The apparatus of claim 87, wherein the output of each one of the band translation devices is configured to couple to a single output device.

137 (new) The apparatus of claim 87, wherein the outputs of the two or more band transition devices are configured to couple to a single output device.

137

87. (new) The apparatus of claim 87, wherein the output of at least one of the band translation devices is configured to couple to a plurality of output devices.

137
26.: (new) The apparatus of claim 87, further comprising a signal combiner having (I).
a plurality of inputs coupled to respective plurality of band translation device outputs,
and (II) an output coupled to one or more output devices.

PATENT Page 19 of 27

28: (new) The apparatus of claim.88, wherein the output of the signal combiner is coupled to each of the one or more output devices.

125. (new) The apparatus of claim 28, wherein the output of the signal combiner is coupled to a first subset of the one or more output devices, the apparatus further compitaing a second signal combiner having a plurality of inputs coupled to respective plurality of band translation device outputs, and an output coupled to a second subset of one or more output devices:

(new) The apparatus of claim. So, further comprising a respective plurality of filters, each respective filter coupled between a band translation device output and a signal combiner input.

162 (new) The apparatus of claim 161, wherein the plurality of filters are selected from the group consisting of a high pass filter, a lowpass filter, a bandpass filter, and a diplexer.

150 (new) The apparatus of claim 191, wherein the plurality of filters are implemented separately from the crosspoint switch.

164. (new) The apparatus of claim 161, wherein the plurality of filters, the crosspoint which and the plurality of band translation devices are monolithically formed on an integrated circuit.

185. (new) The apparatus of claim 87, further comprising a plurality of variable gain amplifiers coupled to the crosspoint switch, each of the plurality of variable gain amplifiers operable to apply gain or attenuation to a signal input thereto.

166. (new) The apparatue of claim 165, wherein each of the plurality of variable gain amplifiers comprises an input coupled to receive a respective one of the N satellite (F

PATENT Page 20 of 27

signals, a control input, and an output coupled to one of the inputs of the crosspoint switch, wherein each of the variable gain amplifiers is operable, responsive to a control signal received at the control input, to apply gain or attenuation to a signal input thereto.

157. (new) The apparatus of claim 168, further comprising a respective plurality of detectors, each detector having an input coupled to the input of one variable gain amplifier and an output coupled to the control port of said variable gain amplifier, each of the detectors operable to control the gain or attenuation level of the variable gain amplifier as a function of the power detected.

188. (new) The apparatus of claim 188, further comprising a respective plurality of detectors, each detector having an input coupled to the output of one variable gain amplifier, and an output coupled to the control port of said variable gain amplifier, each of the detectors operable to control the gain or attenuation level of the variable gain amplifier as a function of the power detected.

169. (new) The apparatus of claim 166, wherein the crosspoint switch, the plurality of band translation devices, and the plurality of variable gain amplifiers are included within an integrated circuit.

157. (new) The apparatus of claim-87, further comprising at least one LNB converter operable to provide a respective at least one of the N satellite IF signals.

147. (new) An apparatus for distributing one or more channels included within each of a phurality of N satellite signals to one or more output devices, the apparatus compitaing:

a first LNB unit operable to receive a plurality of the N satellite signals, the first LNB unit comprising:

a first LNB converter coupled to receive a plurality of the N satellite alginals and operable to produce a plurality of first satellite IF signals;

PATENT Page 21 of 27

a first crosspoint switch having a plurality of first crosspoint switch inputs coupled to receive respective first satellite IF signals and a plurality of first crosspoint switch outputs, the first crosspoint switch operable to switchably couple any of the first crosspoint switch inputs to any one or more of the first crosspoint switch outputs; and

respective plurality of first band translation devices, each first band translation devices having an input coupled to a respective one of the first crosspoint switch outputs and an output configured to couple to one or more cutput devices, each of the first band translation devices operable to pass one or more channels as supplied thereto; or to frequency translate one or more of the channels as supplied one or more of the channels as supplied to respective one or more channels, wherein the outputs of the first band translation devices are coupled together to provide a first LNB unit output;

a second LNB unit operable to receive a plurality of the N satellite signals, the second LNB unit comprising:

a second LNB converter coupled to receive a plurality of the N satellite signals and operable to produce a plurality of second satellite IF signals;

a second crosspoint switch having a plurality of second crosspoint switch inputs coupled to receive respective second satellite IF signals and a plurality of second crosspoint switch outputs, the second crosspoint switch operable to switchably couple any of the second crosspoint switch inputs to any one or more of the second crosspoint switch outputs; and

respective plurality of second band translation devices, each second band translation device having an input coupled to a respective one of the second crosspoint. Switch outputs and an output configured to couple to one or more output devices, each of the second band translation devices operable to pass one or more channels as supplied thereto, or to frequency translate one or more of the channels as supplied to respective one or more channels, wherein the outputs of the second band translation devices are coupled together to provide a second LNB unit output; and

a signal combiner having inputs coupled to receive the first and second LNB unit outputs and an output coupled to one or more output devices.

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

BLACK BORDERS		
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES	f :	
☐ FADED TEXT OR DRAWING		
BLURRED OR ILLEGIBLE TEXT OR DRAWING	;.	
☐ SKEWED/SLANTED IMAGES		
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS		
☐ GRAY SCALE DOCUMENTS		
☐ LINES OR MARKS ON ORIGINAL DOCUMENT		
☐ REFERENCE(S) OR EXHIBIT(S) SUBMETTED ARE POOR	QUALITY	
OTHER:		

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.